

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Achillea millefolium

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	PROTEIN	Seed	286000.0	369000.0	1.2027089985205746	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Seed	223000.0	334000.0	0.3614060995374496	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CARBOHYDRATES	Plant	133104.0	752000.0	0.5125462432567227	--
15	FIBER	Plant	69000.0	201000.0	-0.16122268403058113	--
35	TANNIN	Plant	28000.0	40000.0	-0.6370616203493836	--
0	PROTEIN	Plant	19116.0	108000.0	-0.5364847835043116	--
0	ASH	Plant	17700.0	100000.0	-0.3796129196407384	--
0	FAT	Plant	7080.0	40000.0	-0.1714507664609065	--
14	POTASSIUM	Plant	3151.0	17800.0	-0.278763301762186	--
28	CALCIUM	Plant	1535.0	8670.0	-0.5262108144941796	--
0	EO	Flower	700.0	5000.0	-0.256861435811866	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
112	ASCORBIC-ACID	Leaf	580.0	3100.0	-0.15627959906914124	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	PHOSPHORUS	Plant	522.0	2950.0	-0.3068982377399405	--
65	MAGNESIUM	Plant	340.0	1920.0	-0.6662824225194472	--
0	EO	Leaf	250.0	16000.0	0.3927378316881657	--
0	EO	Plant	177.0	14000.0	0.3238465858545322	--
15	ASCARIDOLE	Leaf	120.0	6600.0	-0.3837260705884196	--
112	ASCORBIC-ACID	Plant	119.0	672.0	-0.4359276103428388	--
67	1,8-CINEOLE	Leaf	24.0	1680.0	-0.31413337784745815	--
41	CAMPHOR	Leaf	20.0	2880.0	-0.18433975802654748	--
0	ISOARTEMISIA-KETONE	Leaf	20.0	16000.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	SODIUM	Plant	15.0	82.0	-0.2995388449907829	--
16	P-CYMENE	Leaf	9.0	1185.0	0.584380733883737	--
11	GAMMA-TERPINENE	Leaf	9.0	370.0	0.34147926512769305	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	ALUMINUM	Plant	6.0	34.0	-0.6894552686751528	--
35	BORNEOL	Leaf	6.0	275.0	-0.1351054728581718	--
4	TIN	Plant	5.0	26.0	0.34911685139896836	--
7	ISOBORNEOL	Leaf	5.0	320.0	-0.49513094589241385	--
0	YOMOGI-ALCOHOL	Leaf	5.0	270.0		--
0	ASCARIDOLE-ISOMER	Leaf	5.0	335.0		--
31	CARYOPHYLLENE	Leaf	4.0	160.0	-0.5782062507598946	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	ALLO-OCIMENE	Leaf	4.0	140.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	ALPHA-THUJONE	Leaf	3.0	240.0	-0.5168544216563907	--
23	TERPINEN-4-OL	Leaf	3.0	175.0	-0.24039913557404782	--
0	CIS-JASMONE	Leaf	2.0	125.0	1.7044539014540394	--
9	CAMPHENENE	Leaf	2.0	600.0	0.03409920562522311	--
13	ALPHA-TERPINENE	Leaf	2.0	1120.0	0.2663807474003411	--
1	COPAENE	Leaf	1.5	60.0	1.1888404716143406	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	LINALOOL	Leaf	1.0	4000.0	2.122508536493081	--
0	ARTEMISIATRIENE	Leaf	1.0	65.0	-1.414213562373094	--
60	LIMONENE	Leaf	1.0	170.0	-0.268944101986277	--
23	ALPHA-TERPINEOL	Leaf	1.0	80.0	-0.4498172854768475	--
13	GERANIAL	Leaf	1.0	50.0	-0.3978078018016716	--
0	CIS-SABINENE-HYDRATE	Leaf	1.0	80.0	-0.2862032724587523	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ARTEMISIA-ALCOHOL	Leaf	1.0	80.0		--
13	BETA-PINENE	Leaf	1.0	720.0	0.6328642794210592	--
0	LAVANDULOL	Leaf	1.0	15.0	1.7320504652833757	--
5	BETA-THUJONE	Leaf	1.0	30.0	-0.5791445507936085	--
4	SILICON	Plant	1.0	4.5	-0.5190064670266766	--
71	THYMOL	Leaf	1.0	15.0	-0.41187649807173515	--
0	T-CADINOL	Leaf	1.0	15.0	-0.5225815390117998	--
9	TERPINOLENE	Leaf	1.0	50.0	-0.1684008925639172	--
0	CIS-CHRYSANTHENOL	Leaf	1.0	30.0		--
3	ALPHA-CADINOL	Leaf	1.0	15.0	0.03356316627597684	--
5	SABINENE	Leaf	1.0	1225.0	0.5192871434052357	--
20	ALPHA-BISABOLOL	Leaf	1.0	915.0	1.264865272094972	--
0	BETA-CUBEBENE	Leaf	1.0	15.0	-0.27140166674948796	--
28	ALPHA-PINENE	Leaf	1.0	1000.0	-0.15961997585151536	--
0	BETA-CARYOPHYLLENE-OXIDE	Leaf	1.0	30.0	-1.0	--
15	RIBOFLAVIN	Plant	1.0	5.6	-0.40499841324824026	--
14	MANGANESE	Plant	1.0	5.0	-0.6590690061822261	--
0	BETA-CARYOPHYLLENE	Leaf	1.0	65.0	-0.303004238741691	--
0	TRICYCLENE	Leaf	0.6	27.0	-0.8389074385035388	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	COBALT	Plant	0.6	3.1	-0.37614265145342984	--
2	HUMULENE	Leaf	0.5	22.0	-0.3745832187878271	--
22	MYRCENE	Leaf	0.5	20.0	-0.1654584943659963	--
24	CHROMIUM	Plant	0.4	2.5	-0.6300345087929166	--
10	CUMINALDEHYDE	Leaf	0.3	11.0	-0.8843635097531161	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
60	SELENIUM	Plant	0.3	1.6	-0.35611748372726487	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	DELTA-CADINENE	Leaf	0.2	8.0	-0.4292576505663304	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
10	CHAMAZULENE	Plant	0.0	4845.0		--
10	AZULENE	Leaf	0.0	8000.0		--
20	CHOLINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
37	CARVACROL	Leaf				--
7	SUCCINIC-ACID	Plant				--
1	ACONITIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	NERYL-ACETATE	Plant		28.0	-0.5370290118452437	--
2	GERMACRENE-D	Leaf				--
63	MENTHOL	Plant				--
14	BETAINE	Plant				Wealth of India.
0	ALPHA-THUJENE	Leaf				--
24	VANILLIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
44	QUERCITRIN	Plant				--
0	HYDROXYACHILLIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
1	FURFURYL-ALCOHOL	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	DULCITOL	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	COSMOIIN	Plant				Wealth of India.
0	3-OXAGUAIANOLIDE	Plant				--
5	SAPONINS	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	CHAMAZULENE-CARBOXYLIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	CAPRYLIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
12	STIGMASTEROL	Plant				--
2	ACHILLIN	Plant				--
0	MATRICIN	Plant		0.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
7	LUTEOLIN-7-GLUCOSIDE	Plant				--
5	GERANYL-ACETATE	Plant		36.0	-0.5241410325713916	--
0	BETA-SITOSTEROL-ACETATE	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
2	UNDECYLENIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	QUERCETIN-GLYCOSIDE	Plant				--
6	FURFURAL	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-SABINOL	Plant		100.0	1.0	--
0	TRICOSANE	Plant				--
0	ARTEMITIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	2-PENTYL-5-PROPYLRESORCINOL	Plant		70.0		--
12	PYROCATECHOL	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
18	OLEIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CAPRIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
6	STACHYDRINE	Plant				--
0	ACHILLICIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	ARTEMISIA-KETONE	Leaf				--
0	MANDELONITRILE-GLUCOSIDE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.

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78	LUTEOLIN	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
8	INOSITOL	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
47	BETA-SITOSTEROL	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
11	ALPHA-PHELLANDRENE	Leaf				--
0	TRANS-TRANS-FARNESOL	Plant		160.0		--
176	QUERCETIN	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
13	FORMIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DEACETYLMATRICARIN	Plant				--
2	TRANS-DEHYDROMATRICARIA-ESTER	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ARABINOSE	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	2,3-DEHYDROXYDESACETOXY MATRICIN	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
2	PRUNASIN	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
39	NIACIN	Plant				--
0	CEROTINIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CAMPHERENONE	Plant		70.0		--
0	ACHILLELINE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
4	MANDELIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	LEUCODIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
4	ALPHA-PEROXYACHIFOLIDE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
1	TRANS-CARVEOL	Plant		150.0	1.4141140551271352	--
15	FOLACIN	Plant				--
62	GALLIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	CIS-NEROLIDOL	Plant		230.0	1.0	--
0	APIGENIN-GLUCOSIDE	Plant				--
2	(-)-BETONICINE	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
43	PROTOCATECHUIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
6	MYRISTIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	SUCCINIC-ACID	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
6	CASTICIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
1	ACHILLEINE	Plant				--
2	ANACYCLIN	Root				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
2	MALTOSE	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	KILOCALORIES	Plant		2900.0	-0.36931512722389037	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
53	BETA-CAROTENE	Plant				--
0	ALPHA-PATCHOULENE	Plant		90.0		--
23	FOLIC-ACID	Leaf				Wealth of India.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	COUMARINS	Plant		3500.0	-1.0	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	THIOPHENES	Leaf		167.0		--
101	APIGENIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PROCHAMAZULENE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	HOMOSTACHYDRINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	ISOSCHAFTOSIDE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
2	LUTEOLIN-7-O-GLUCOSIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	BETA-HIMACHALENE	Plant		50.0		--
0	ACHICEINE	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
11	ADENINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	LYSINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
5	ISOVALERIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-MUROLENE	Leaf				--
0	PROAZULENE	Plant				--
61	FERULIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	BENZALDEHYDECYANHYD RINGLYCOSIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	THIOPHENES	Flower		167.0		--
0	GAMMA-CADINENE	Leaf				--
8	PHLOROGLUCINOL	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	MOSCHATINE	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	HEPTADECANE	Plant				--
2	APIGENIN-7-O-GLUCOSIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

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0	BETA-FARNESENE	Leaf				--
0	(E)-NEROLIDOL	Leaf				--
34	SALICYLIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	ACETYLBALCHANOLIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	8-ACETYLAGELOLIDE	Leaf				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	LUTEOLIN-7-O-BETA-D-GLUCOPYRANOSIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	ISORHAMNETIN	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
2	ALPHA-HUMULENE	Leaf				--
41	TANNIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
13	EUCALYPTOL	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	BALCHANOLIDE	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

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0	CIS-CARVEOL	Plant		200.0	1.0	--
31	THIAMIN	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
6	ALPHA-THUJONE	Plant				--
26	PHENOL	Plant		155.0	-1.0	--
0	MILLEFOLIDE	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
6	GUAIAZULENE	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
32	HYDROQUINONE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
102	CAFFEIC-ACID	Plant				--
5	BETA-ELEMENE	Leaf				--
0	(-)-VIBURNITOL	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	8-ANELOOXYARTABSIN	Plant				--
2	LINOLENIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	ISOBUTYL-ACETATE	Plant				--
3	PONTICAEOXIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	FARNESENE	Plant				--
0	DIHYDROPARTHENOLIDE	Leaf				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
77	ZINC	Plant				--
3	ALPHA-CURCUMENE	Leaf				--
3	SWERTISIN	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
3	CIS-DEHYDROMATRICARIA-ESTER	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CIS-BETA-FARNESENE	Plant		110.0		--
18	TERPINEOL	Plant				--
0	PALMITIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	MILLEFIN	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
7	GLUCOSE	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	HISTIDINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
6	BUTYRIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
87	RUTIN	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
0	8-ACETOCYARTABSIN	Plant				--
0	THIAMINE	Plant				--
0	LINOLEIC-ACID-METHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
0	ISOARTEMISIA-KETONE	Plant				--
76	EUGENOL	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
1	DEXTROSE	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
0	WATER	Plant		823000.0	0.22291061491730124	--
0	AUSTRICIN	Plant				Wealth of India.
0	ALPHA-COPAENE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	SUCROSE	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	CINEOLE	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CHRSANTHENYL-ACETATE	Leaf				--
0	BALCHANOLIDE-ACETATE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
1	PALMITIC-ACID-ETHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
18	MANNITOL	Plant				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
12	GLYCINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	DEACETYLMATRICAIN	Leaf				--
12	BORNYL-ACETATE	Plant		50.0	-0.43702890811674244	--
0	VICENIN-3-SCHAFTOSIDE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	5-HYDROXY-3,6,7,4'-TETRAMETHOXYFLAVONE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	FIBER(DIETARY)	Plant		412000.0	0.5188999674765548	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LINOLEIC-ACID-ETHYL-ESTER	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
6	IRON	Plant				--
0	DESACETYLMATRICIN	Leaf				Bisset, N.G., ed. 1994. <i>Herbal Drugs and Phytopharmaceuticals</i> . CRC Press. Boca Raton, FL. 566 pp.
0	VIBURNITOL	Plant				--
2	ASPARAGINE	Plant				List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis</i> , Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	6,10,14-TRIMETHYL-PENTADECAN-2-ONE	Plant		32.0		--
8	STEARIC-ACID	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
0	PENTACOSANE	Plant				--
77	CHLOROGENIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
0	OCTEN-3-OL	Leaf				--
1	GALACTOSE	Plant				Pedersen, M. 1987. <i>Nutritional Herbology</i> . Pederson Publishing. Bountiful, Utah. 377 pp.
8	GLUTAMIC-ACID	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). <i>Economic Botany</i> 48(2): 111-120, 1994.
17	THUJONE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	BETONICINE	Plant				Wealth of India.
0	VICENIN-2-SCHAFTOSIDE	Plant				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	RESIN	Plant		6000.0	-0.8622069963910537	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2,3-DIHYDROACETOXYMATICIN	Plant				--
0	FIBER(CRUDE)	Plant		69000.0	-0.6486558303247424	--
27	LINOLEIC-ACID	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
19	INULIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DELTA-4-CARENE	Leaf				--
15	TRIGONELLINE	Plant				Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in <i>Achillea millefolium</i> L. (Asteraceae). Economic Botany 48(2): 111-120, 1994.
0	4-OXO-3,4-DIHYDRO-2,3-DIAZAPHENOXANTHIN	Plant		36.0		--
0	SPATHULENOL	Plant		495.0	2.658868354096619	--
13	PALMITIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.